ARCHITECTVRE

VOL. XVII. APRIL 15, 1908. No. 4

ARCHITECTURE, conducted by a Board of Architects in the interests of the profession, is published the fifteenth of every month by FORBES & COMPANY, LTD., (A. H. Forbes, Prest.) 225 Fifth Avenue, New York. Its opinions on technical subjects are either prepared or revised by specialists.

PRICE, mailed flat to any address in the United States, Mexico or Cuba, $5.00 per annum, in advance; to Canada, $6.00 per annum; to any foreign address, $7.00 per annum.

ADVERTISING RATES upon request. The writing and displaying of advertisements is an art in itself, and the publishers will be pleased to give the Advertiser the benefit of an Expert's experience in this line at no additional expense.

THE PUBLISHERS regret that owing to the demand the supply of back copies of ARCHITECTURE is limited. Prices will be quoted on application The regular price of each number is 50c.

ENTERED at the New York Post Office as second-class mail matter.

PLATES AND ILLUSTRATIONS.

THE CRIPPLED CHILDREN'S SCHOOL, New York, - - Plate XXX
Schickel & Ditmars, Architects.
PHIPPS MODEL TENEMENTS, New York, - - - - Plate XXXI
Whitfield & King, Architects.
PUBLIC LIBRARY NO. 29, NEW YORK, - - - - Plate XXXII
McKim, Mead & White, Architects.
UNION TRUST COMPANY BUILDING, Washington, D. C.
Exterior, - - - - - - - - - - Plate XXXIII
Elevation, - - - - - - - - Double Plate XXXIV
Details—Interior and Exterior, - - - - - - - 61-62
Plans, - - - - - - - - - - - - - 63
Wood, Donn & Deming, Architects.
U. S. POST OFFICE, New Orleans, La.
Accepted Competitive Design, - - - - - - Plate XXXV
Hale & Rogers, Architects.
STRAUS PASTEURIZED MILK LABORATORY, New York, - Plate XXXVI
J. H. Duncan Architect.
SESRUN CLUB, New York, - - - - - - Plate XXXVII
Neville & Bagge, Architects.
BUSINESS BUILDING, New York, - - - - - Plate XXXVIII
Howells & Stokes, Architects.
ARCHITECTS OF TO-DAY.
MR. OSWALD C. HERING, New York. - - - - - 54
RESIDENCE, Butler Sheldon, Columbus, O.
Exteriors and Plans, - - - - - - - - 55
Oswald C. Hering, Architect.
A PROPOSED Y. M. C. A. BUILDING.
Perspective, - - - - - - - - - - - - 56
Elevation and Plans, - - - - - - - - - - 57
Albro & Lindeberg, Architects. T. R. Johnson, Associate.
MONTHLY PICTORIAL REVIEW OF OUR ENGLISH CONTEMPORARIES, 58-59
RESIDENCE, Mrs. A. A. Burrage, Brookline, Mass.
Perspective, Detail and Plans, - - - - - - - 60
Lois L. Howe, Architect.
COUNTRY HOUSE, A. Durant Sneden, Avon, N. J. - - - - 64-66
A. Durant Sneden, Architect.

Copyright, 1908, by FORBES & COMPANY, LTD., 225 Fifth Ave., New York

SCHOOL OF ARCHITECTURE
UNIVERSITY OF PENNSYLVANIA

THE FOUR-YEAR COURSE. Full professional training (with an option in Architectural Engineering) leading to the degree of B. S. in Arch. Advanced standing is offered to college graduates, or the two degrees of A. B. and B. S. in Arch. can be taken in six years.

THE GRADUATE YEAR. Affords opportunity for advanced work in design and other subjects of the course leading to the degree of M. S. in Arch.

THE TWO-YEAR SPECIAL COURSE. For qualified draftsmen. Offers advanced technical training with a Certificate of Proficiency.

FOR FULL INFORMATION address Dr. J. H. Penniman, Dean of the College, University of Pennsylvania, Philadelphia.

PROFESSIONAL COMMENT.

WE architects in the United States are in the habit of believing that the standards of art in old Europe compel a more thorough recognition of our profession than with us. We have an idea that the real estate corporation and the speculator who play such an important part in the development of American cities are of little consequence in old Europe. All this would be dispelled even by a superficial examination of Berlin and Vienna, both of which are being developed in their outlying districts by the same class of speculators and under the same conditions in vogue in our own country, with the one difference that the speculator seems to have a greater regard for artistic considerations than can usually be found among the same type of men in our own land. It is somewhat discouraging to our ancient profession, but it will be found nevertheless that but a small proportion of the buildings in German and Austrian cities are under the direct control of the architects.

A GLANCE over the principal cities of modern Europe naturally provokes comparison with American cities—and to the American architect the comparison is not gratifying to our national pride when the cities are viewed as a whole. In making this comparison one is unconsciously reminded of the British Ambassador's remark in his American Commonwealth that "the one distinct failure in American democracy is in the government of cities," for by comparison, the defects of American cities are of the larger and more public kind rather than in the individual buildings. An American must regretfully admit that democracy has failed in giving the proper consideration to the artistic side of city planning that is so essential to a beautiful city and that our greatest hope in America must be to educate our public to a proper appreciation of this point of view from the rather sordid motive that "civic beauty is a civic asset." After a somewhat superficial view of the larger continental cities, we are reluctantly convinced that it is the government and not the ability of the individual architect that has contributed mainly to the better results shown in Continental Europe. A wave of civic reconstruction is passing over Europe and this reconstruction is being carefully guided by government restrictions which compel good aesthetic results even through the sacrfice of what we would consider the rights of the individual. Structural uniformity being compelled by law the individual never can transcend the limits of official resistance and his true precedent in architectural style is unconsciously grafted upon the city ordinances so that a reasonable amount of uniformity so necessary to a successful ensemble is sure to result. The individual building in these cities frequently fails from the American point of view in meeting the requirements of either commerce or utility. The practical American frequently does this much better and with a refinement of detail and design which compares most favorably with the work

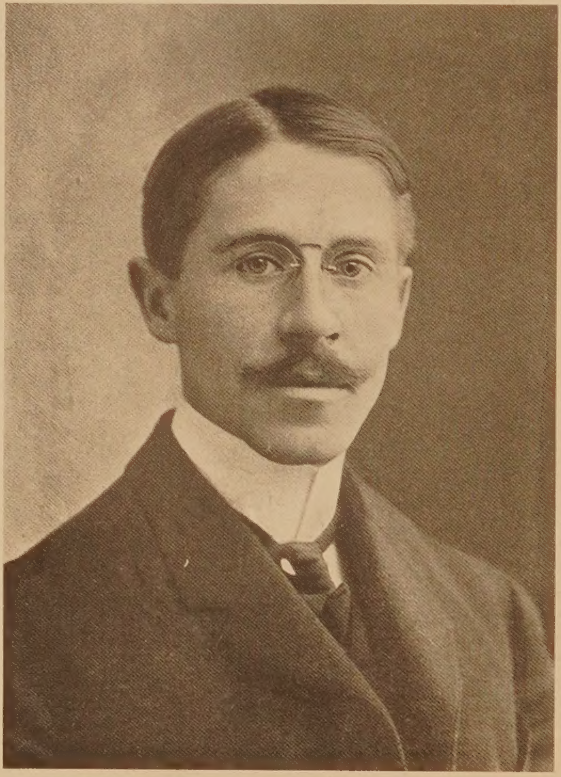
THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, D. C.
DIVISION OF ARCHITECTURE

Offers a four year technical course leading to the degree of Bachelor of Science in Architecture, and a three year special course for architectural draughtsmen.

For catalogues, application blanks, and further information, address THE REGISTRAR.

of the average Continental designer, but as he works under practically no restrictions as to height, historic precedent or motif, he fails to maintain the proper relation to his neighbors which is necessary for a successful whole.

ACCORDING to a writer in the Burlington Magazine the scaffolding now surrounding the Campanile of St. Marks in Venice during its reconstruction, is an object of "real beauty" itself as well as being quite novel from a mechanical standpoint. This scaffolding is said to transform this dignified old Campanile almost into a mediæval tower so that it has more the appearance of ein' feste Burg than a Renaissance Italian belfry. The scaffolding is movable and is formed of four high beams placed horizontally on each side of the Campanile. These beams support the platforms and the roof, the latter being made of wooden rafters and covered with a cloth which can be easily removed in case of wind. The four beams again rest on four arms or poles, each one formed of durable iron rods shaped like a U. These poles which hoist up the entire mass of scaffolding are raised by special screws simply worked by screw bolts so that the height can be regulated to a nicety. The actual extent of each hoisting of the scaffold is generally limited to one meter and a half (a little less than five feet) and it is calculated that about twenty-six hoistings will be required to reach the actual bell chamber. Every time the hoisting is to be done eight men are told off for the job, which takes about an hour, and in order to insure absolute accuracy in the screwing-up a bell is rung on each of the four sides of the tower at the same moment. By using this movable scaffold absolutely independent of the structure under erection, the workmen are thoroughly protected from the weather, and at the same time this protection and its platform is moved up as required. An electric elevator inside the cone carries up the building materials. The height of the completed Campanile with the bell chamber and visible roof will be 100 meters. At this writing but seventeen meters are completed. At the rate of progress now being made it is expected that the work will be completed in 1910.

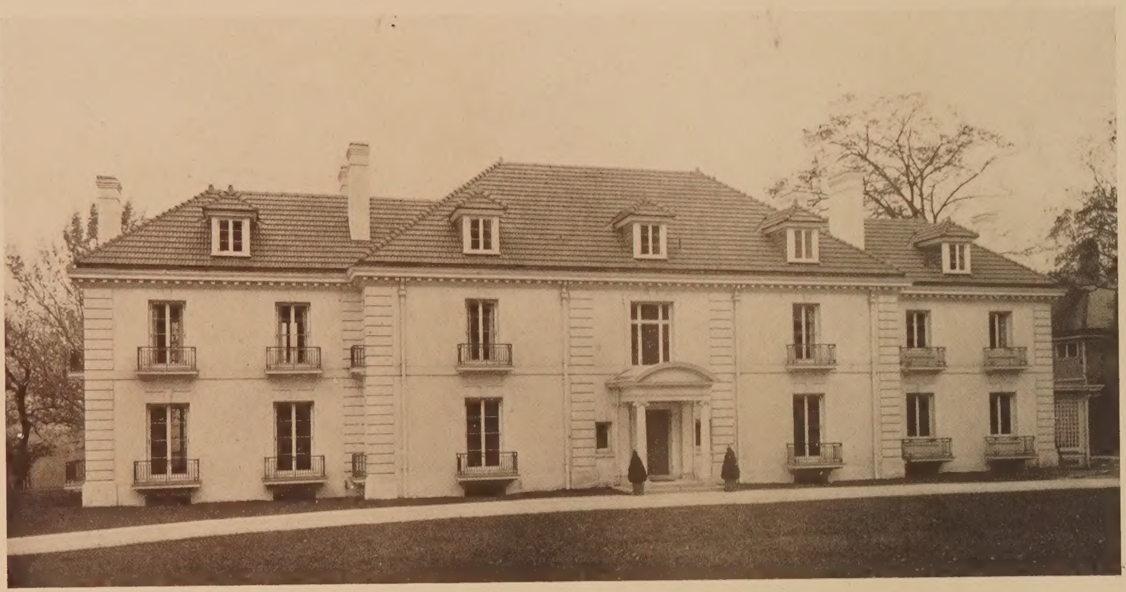


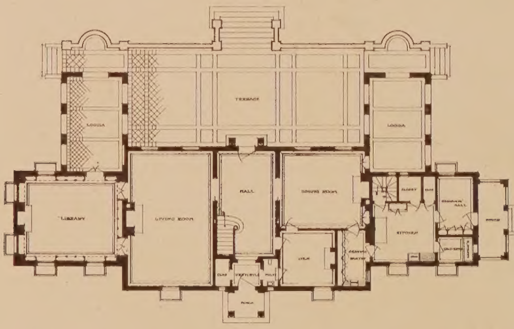
Architects of To-day.

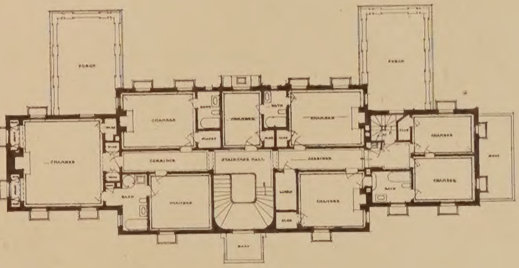
MR. OSWALD C. HERING, NEW YORK.

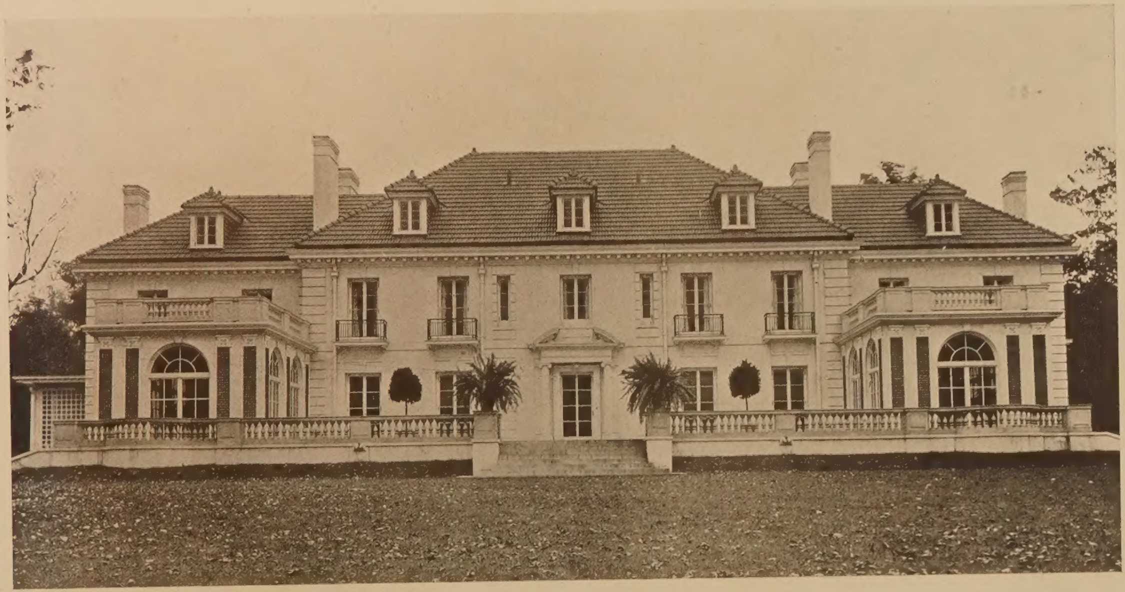
A CITIZEN of New Amsterdam will still find many points of architectural similarity with his home city in old Amsterdam. The high stoop so characteristic of New York, was introduced from the parent city by the Dutch founders of New York through their desire to keep the main story of their homes sufficiently high to avoid the dampness due to the pile foundations upon which their homes were built. Although the same reasons did not hold good in newer New York the early Knickerbocker had "got the habit," and he continued that method of construction in his home up to a very few years ago when he suddenly awoke to the fact that in following the ancient precedent he was sacrificing the most important floor of his dwelling for reasons which were not founded upon actual necessity, and some fifteen years ago New York began the reconstruction of its dwellings upon what we know as the "American basement" plan, thereby gaining practically another story in our dwellings. Old Amsterdam is now going through the same system of reconstruction which, though actuated by the same motives and the application of modern systems of construction which makes it possible to waterproof the lowest stories of the Dutch dwellings. The newer portions of the old city are therefore being built with their main story but a few steps off the street and many of the old dwellings are being altered in exactly the same manner as is now in vogue in New York. Amsterdam is one of the few Continental cities which feels only to a minimum extent the influence of the new modernist movement—and, judging by the few examples in the old city, the modern Dutch architect seems to act wisely in sticking to the true styles of the low countries, for in most cases where he has tried it he seems to have failed lamentably in obtaining anything like the good results visible in German cities. Amsterdam is one of the few Continental cities which still seems content to be considered old except in its sections which are actually new and in some of its older quarters an effort is being made to preserve historic style by mutual agreement and, while in the sections built some twenty years ago there was a distinct retrograde movement towards a type of nondescript building which had no relation to the history of the country, the architects of today seem to be making a distinct effort to preserve the national characteristics which give so much charm to the Dutch cities.

THE way we run in ruts is wonderful: our inability to find out the right principles on which to set to work to accomplish what we take in hand, or to go to the bottom of things, is simply astonishing, while the resignation with which we accept the recognized and usual as the right and inevitable is really beautiful.



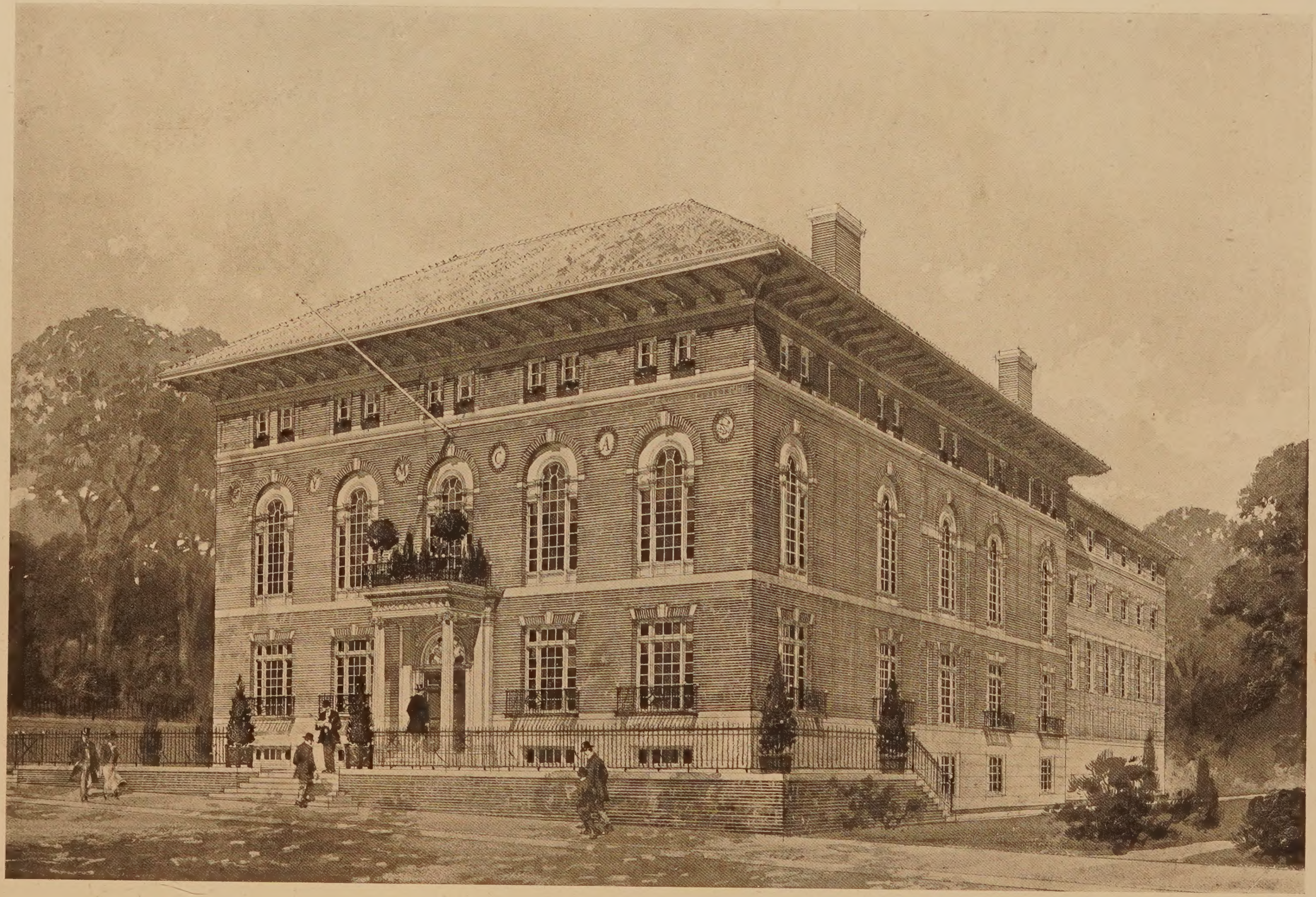






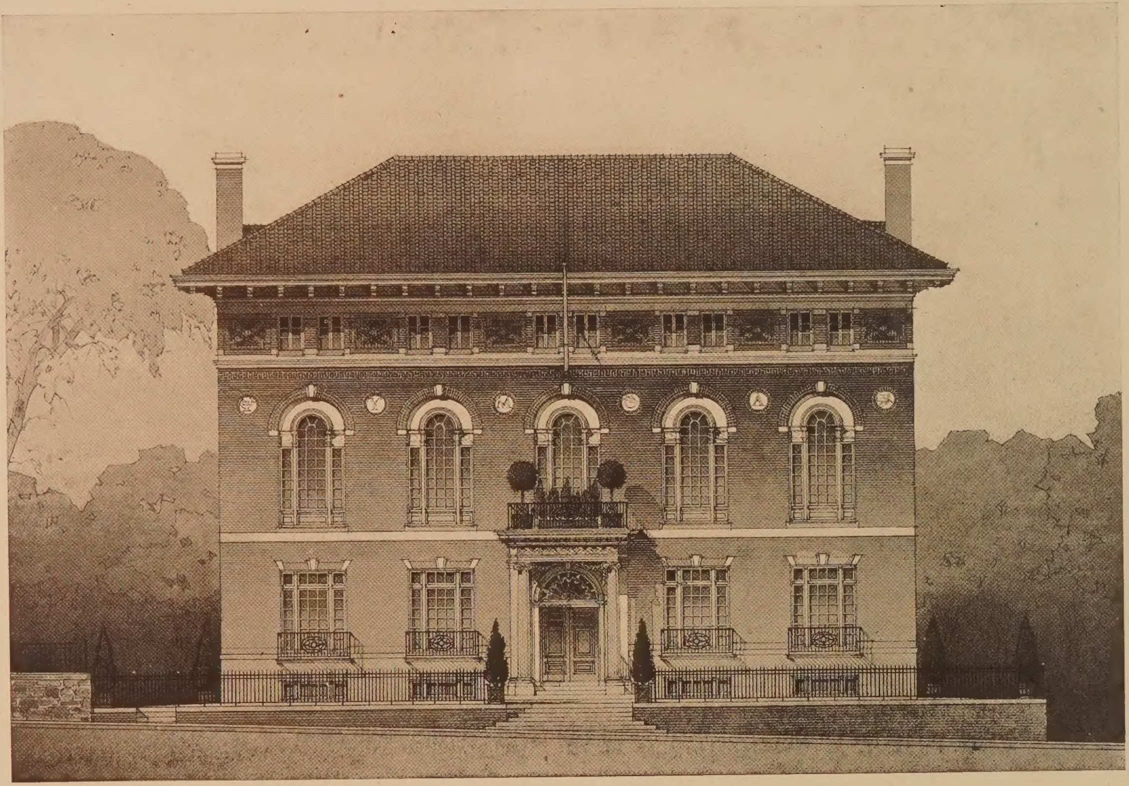
RESIDENCE, BUTLER SHELDON, COLUMBUS, O.

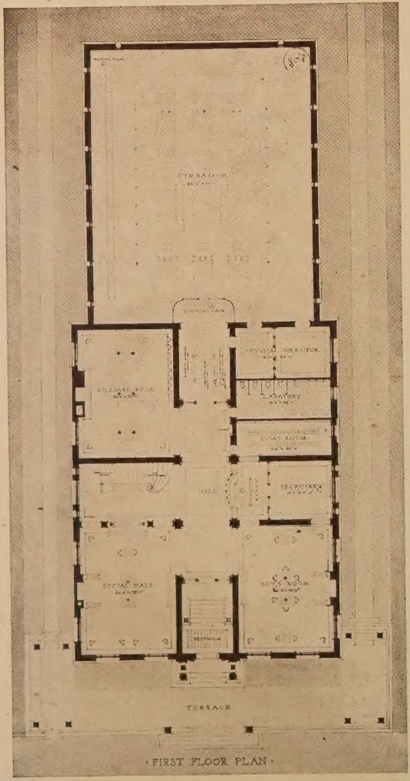
Oswald C. Hering, Architect.

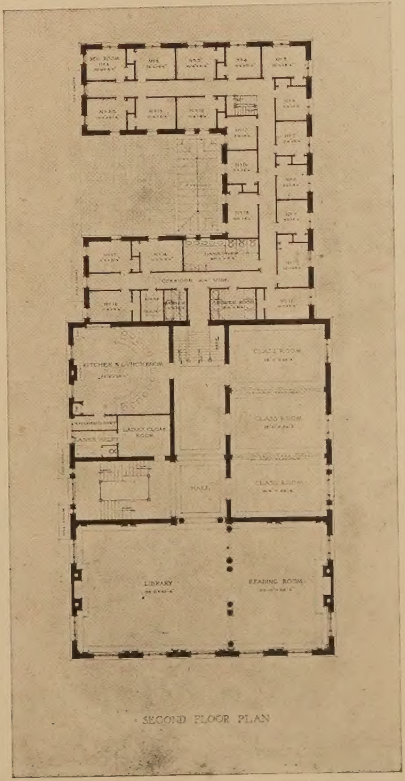


PERSPECTIVE FOR A PROPOSED Y. M. C. A. BUILDING.

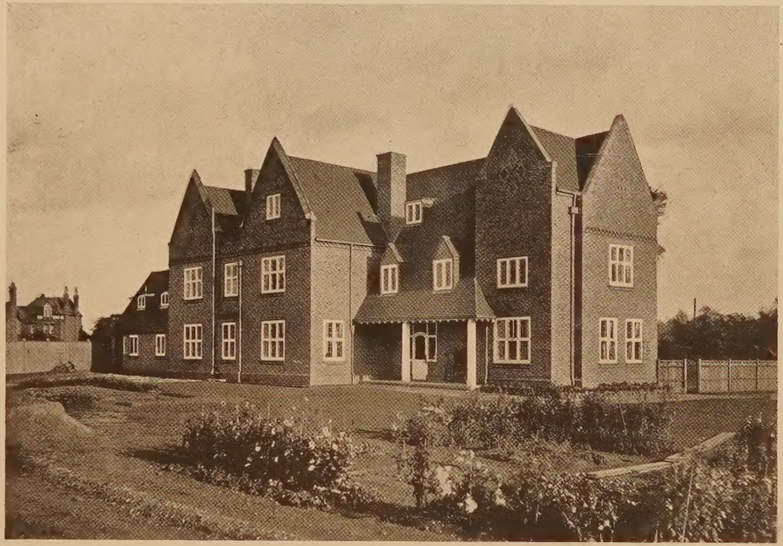
Albro & Lindeberg, Architects. T. R. Johnson, Associate.



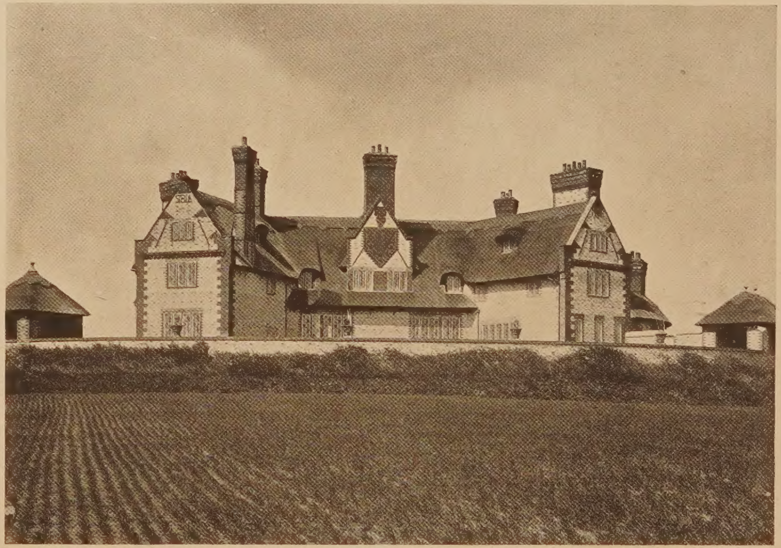




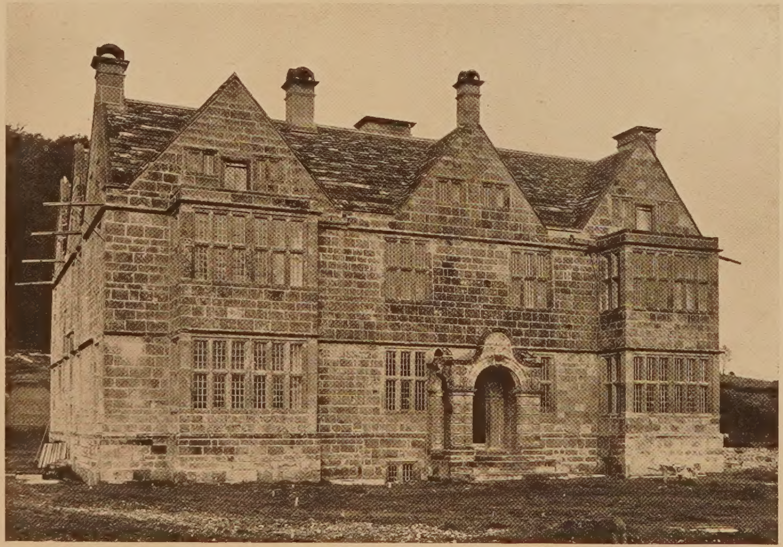
ELEVATION AND PLANS FOR A PROPOSED Y. M. C. A. BUILDING. Albro & Lindeberg, Architects. T. R. Johnson, Associate.



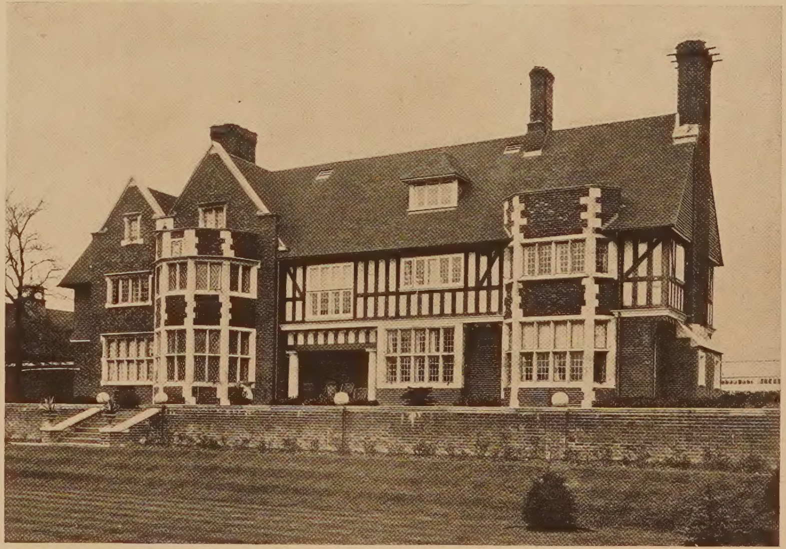
Residence, Donald Hope, Birmingham. Buckland & Farmer, Arch's.



St. Mary's, Happisburgh, Norfolk. D. Blow, Arch.

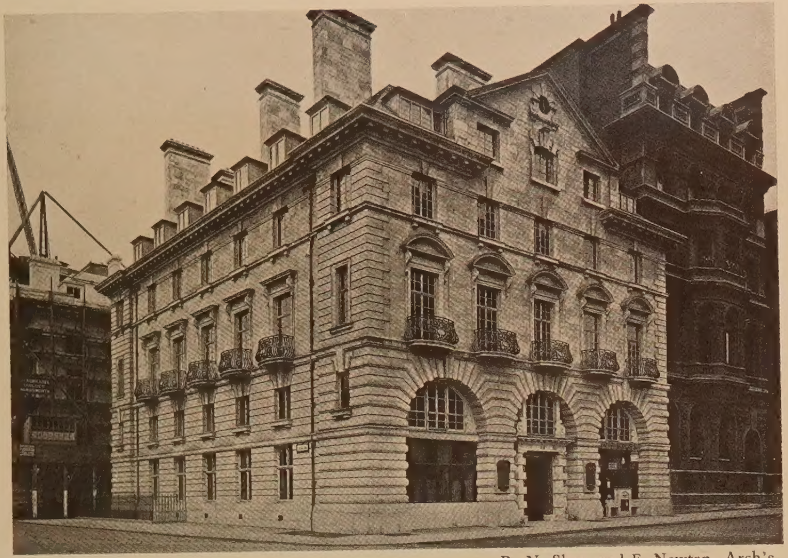


New Berwick House, Tisbury. D. Blow, Arch.

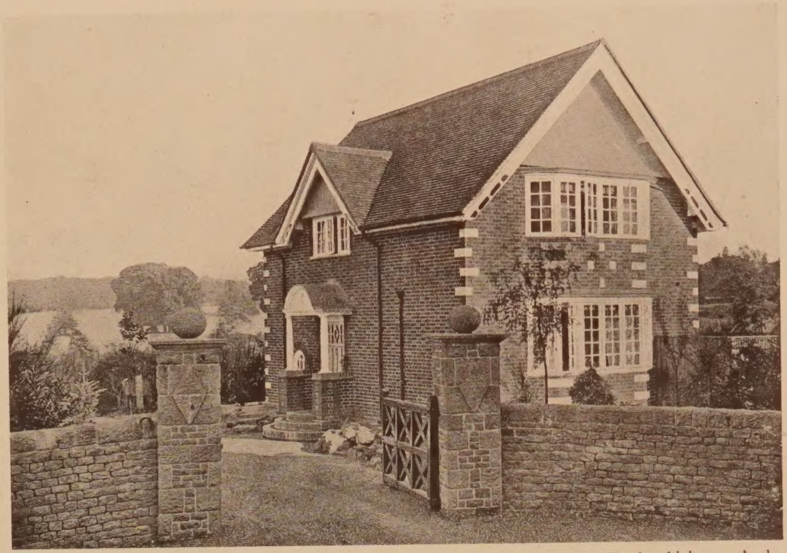


House at Oadby, Licester. S. Harrison & Sons, Arch's.

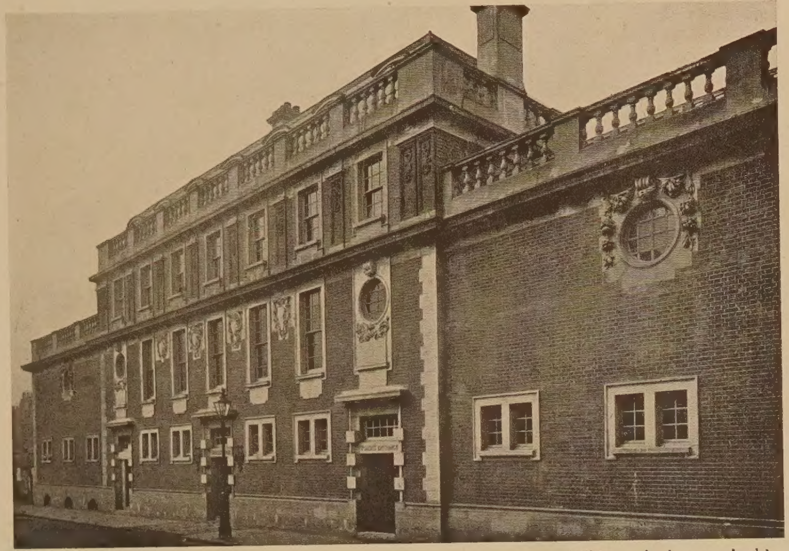
MONTHLY PICTORIAL REVIEW OF OUR ENGLISH CONTEMPORARIES.



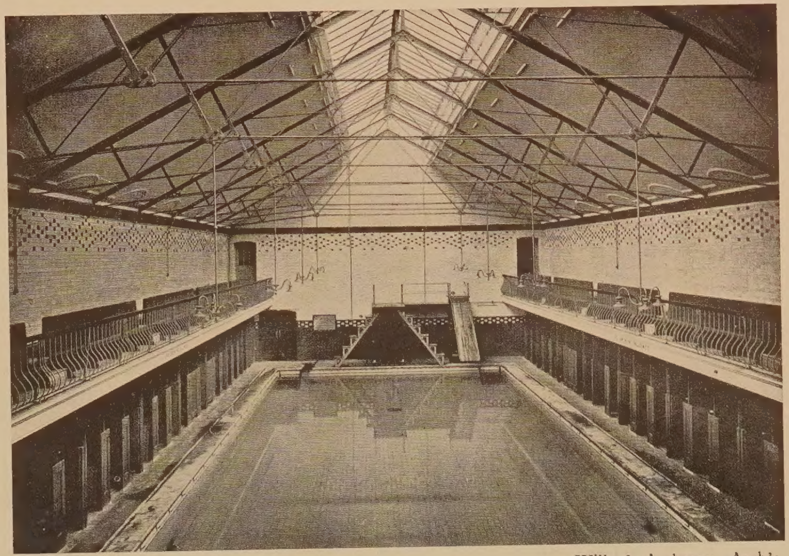
Alliance Assurance Building, London. R. N. Shaw and E. Newton, Arch's.



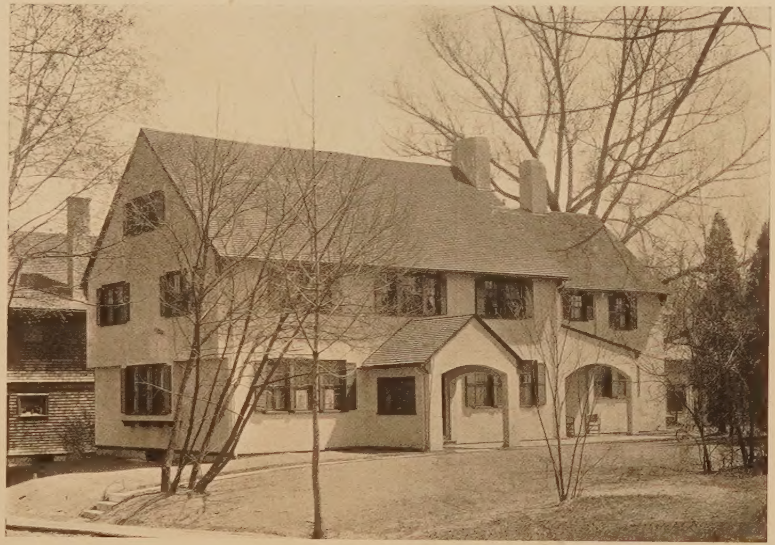
The Lodge, "Broomclose," Cobham. W. A. Aickman, Arch.

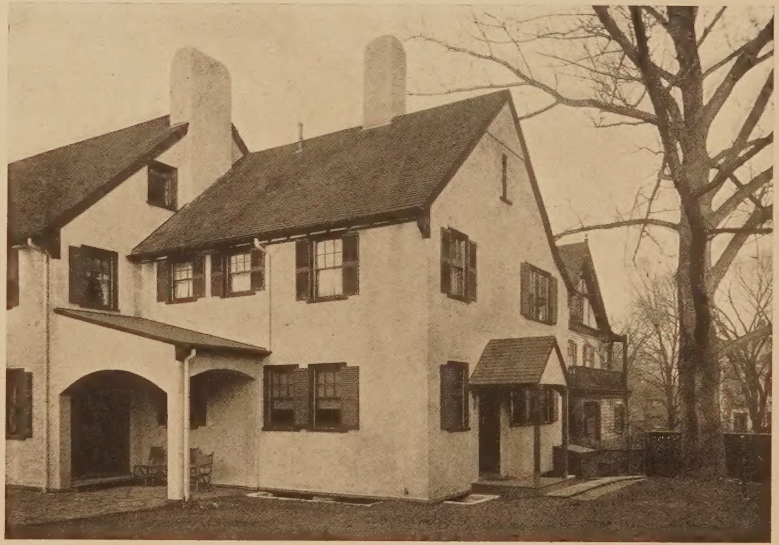


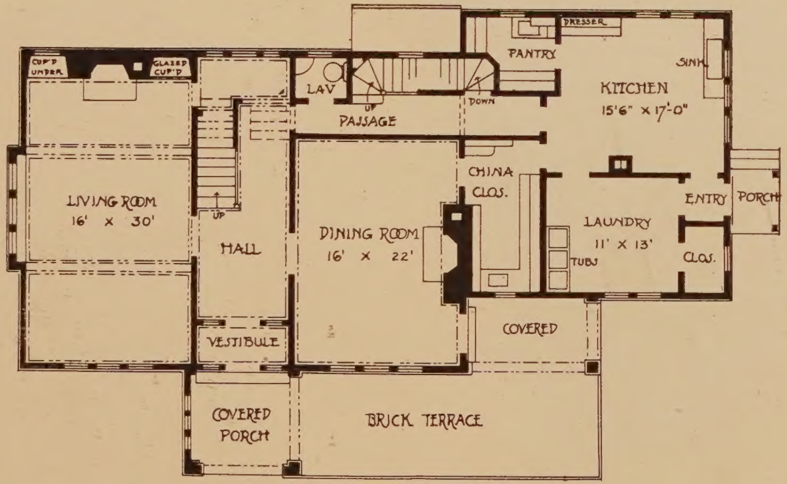
Public Baths, Chelsea. Wills & Anderson, Arch's.

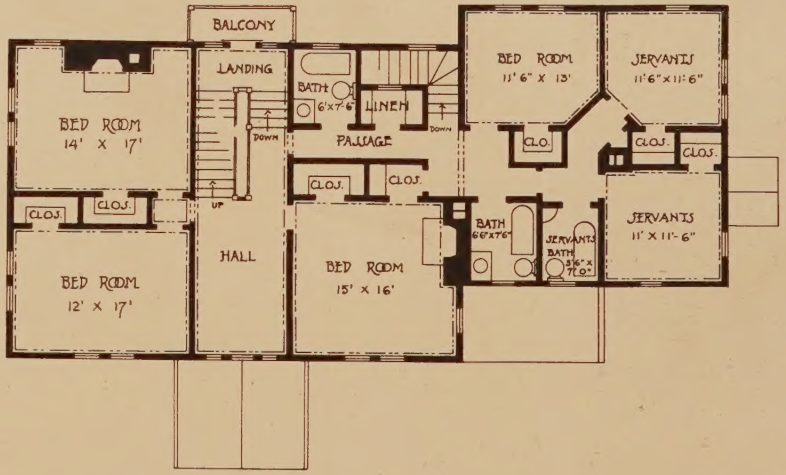


Interior, Public Baths, Chelsea. Wills & Anderson, Arch's.



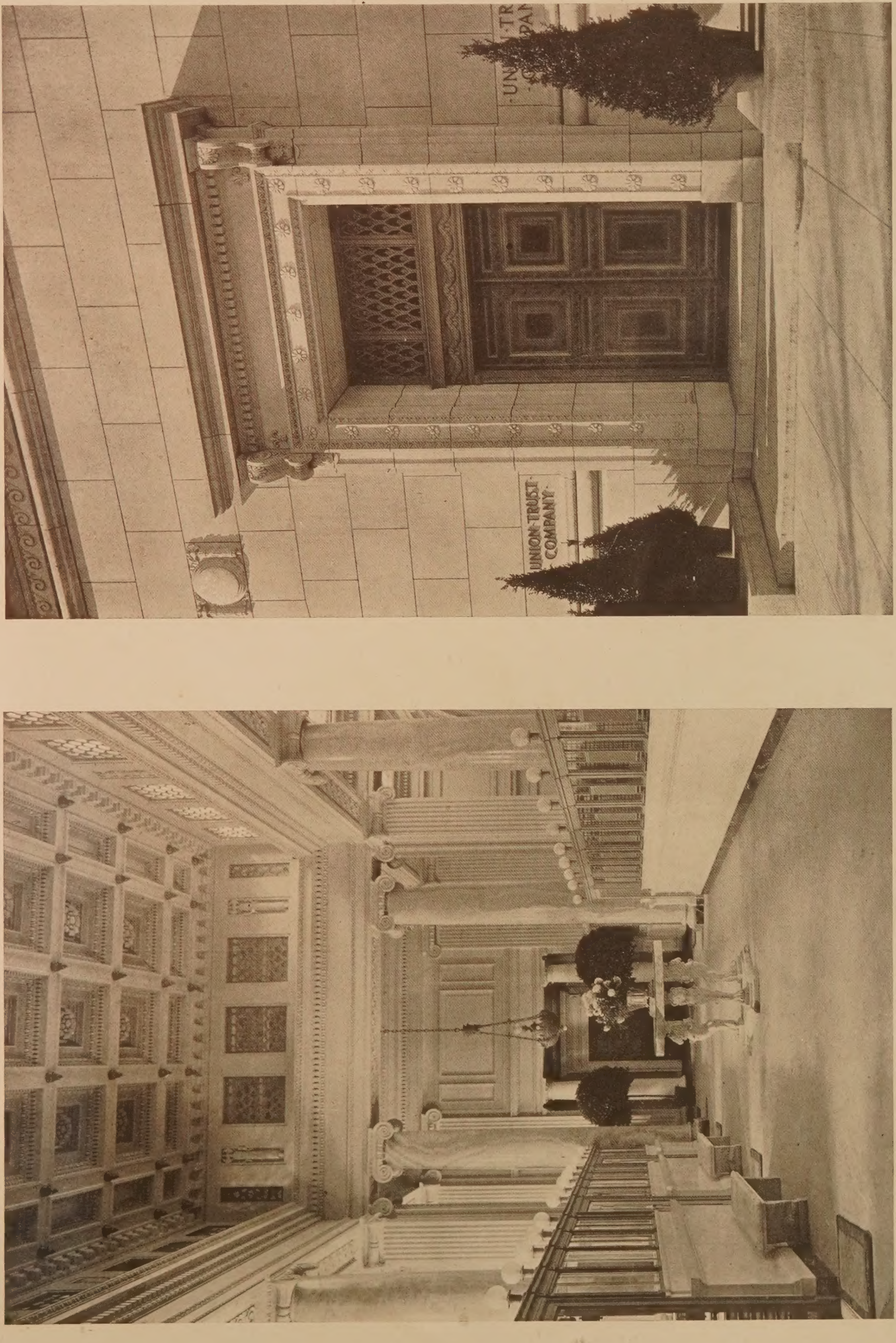






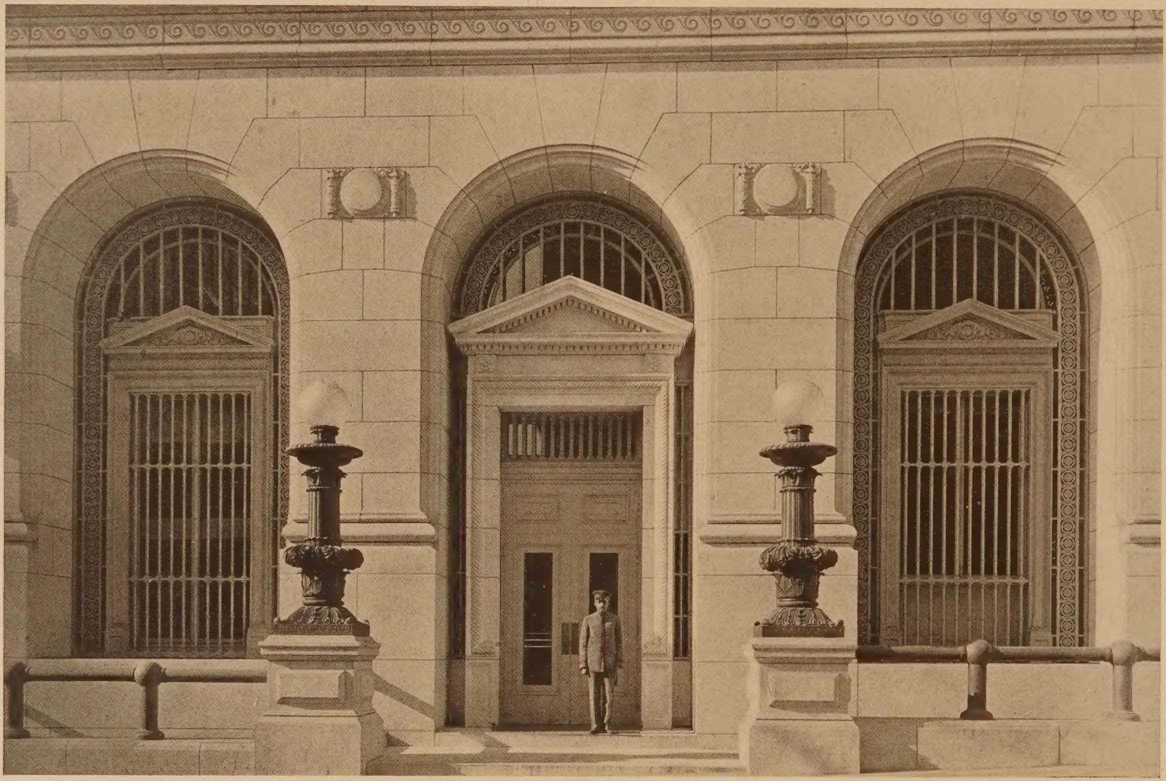
PERSPECTIVE, DETAIL AND PLANS, RESIDENCE, MRS. A. A. BURRAGE, BROOKLINE, MASS.

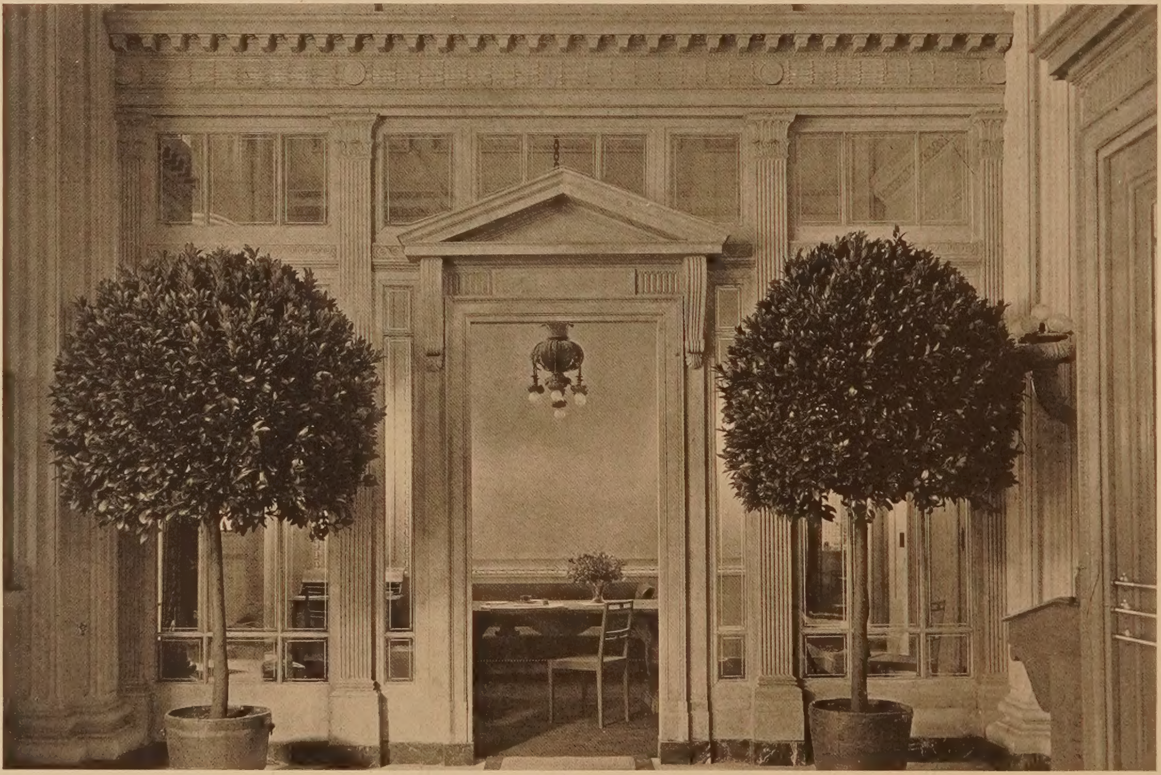
Lois L. Howe, Architect.



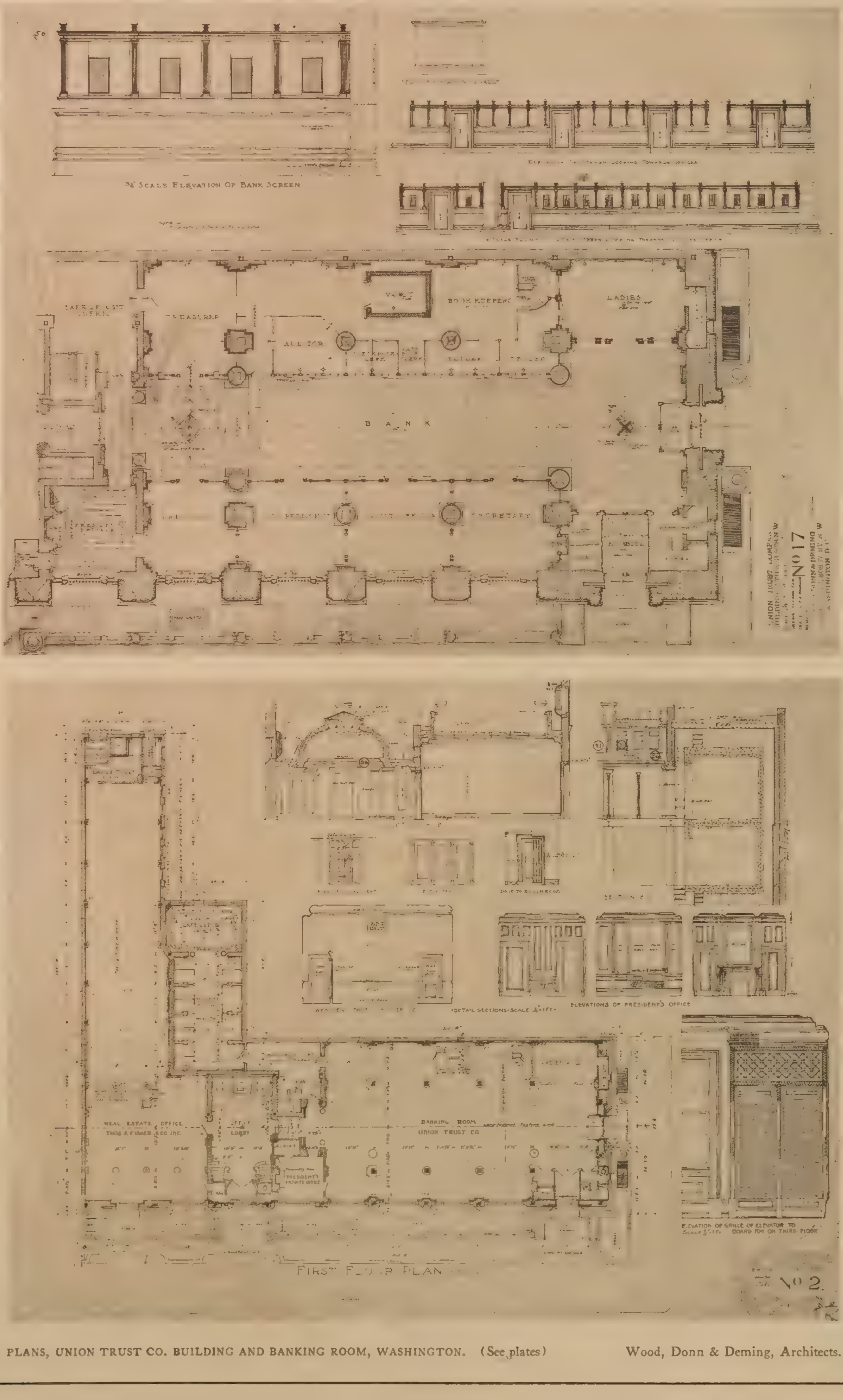
INTERIOR BANKING ROOM AND ENTRANCE, UNION TRUST CO. BUILDING, WASHINGTON.

Wood, Donn & Deming, Architects.

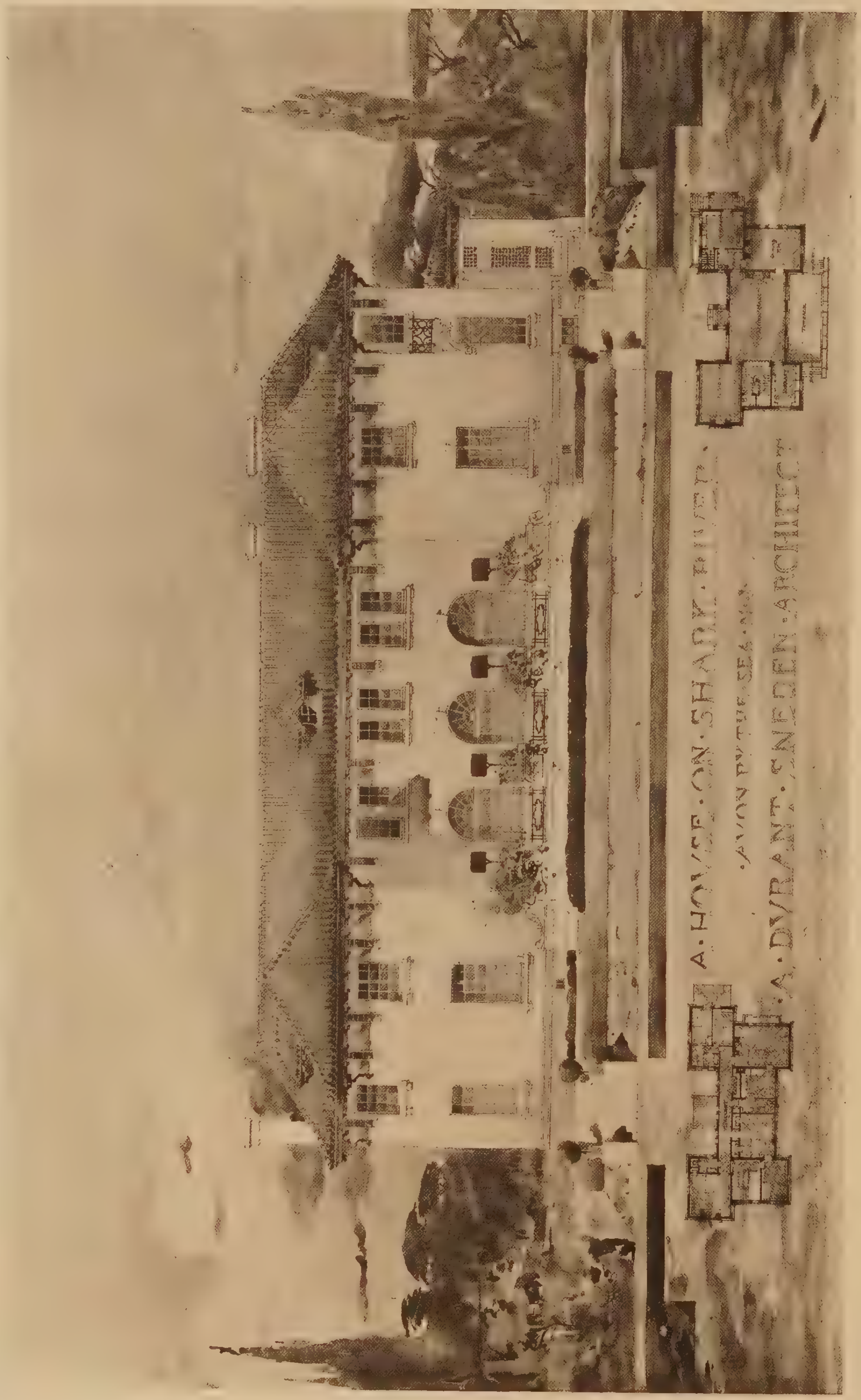




EXTERIOR ENTRANCE AND ENTRANCE TO LADIES' ROOM, UNION TRUST CO. BUILDING, WASHINGTON. Wood, Dunn & Deming, Architects.



PLANS, UNION TRUST CO. BUILDING AND BANKING ROOM, WASHINGTON. (See plates) Wood, Donn & Deming, Architects.



A. Durant Sneden, Architect.

DESIGN FOR COUNTRY HOUSE, A. DURANT SNEDEN, AVON-BY-THE-SEA, N. J.

THE RELATION OF ILLUMINATING ENGINEERING TO ARCHITECTURE, FROM THE ENGINEER'S STANDPOINT.

By E. L. Elliott.

According to the most plausible theory of man's descent, the original "family tree" of the whole human race actually stood in the forest, and our common ancestors disported themselves among its branches, instead of merely having their cards attached, as represented by the present day genealogists. At a subsequent time natural caves furnished shelter from the elements and the too familiar attention of the larger and fiercer animals. As developing intellect began to give primitive man the ascendancy over the lower order of brutes he began to construct shelters out of stones and boughs. These shelters were, of course, the work of the individual dweller. With the development of such rude shelters into more elaborate dwellings, such structures enlisted the co-operation of a number of individuals. Co-operation invariably requires leadership. Where the work of more than one individual is directed to a common end, there must be a director. Thus, in the development of building, there came a time in its very early stages of development when a master-builder was a necessity. The word "Architect" is merely the Greek equivalent of master-builder.

The fundamental purpose of the architect is thus disclosed; namely, to plan and direct the construction of a building so that as a whole it shall fulfill all the purposes for which it is intended. Herbert Spencer has shown that the aesthetic takes precedence of the desire for protection in the evolution of dress; and, while the same order can probably not be shown in the evolution of building, it is certainly true that the desire to decorate was very nearly contemporaneous with the ability to build. Thus, almost from the beginning, building involved two theoretically distinct elements; namely, Utility and Beauty. These two elements, however, were practically connected; and thus the architect became not only the mere director of labor, but the originator and arbiter of art as applied to building.

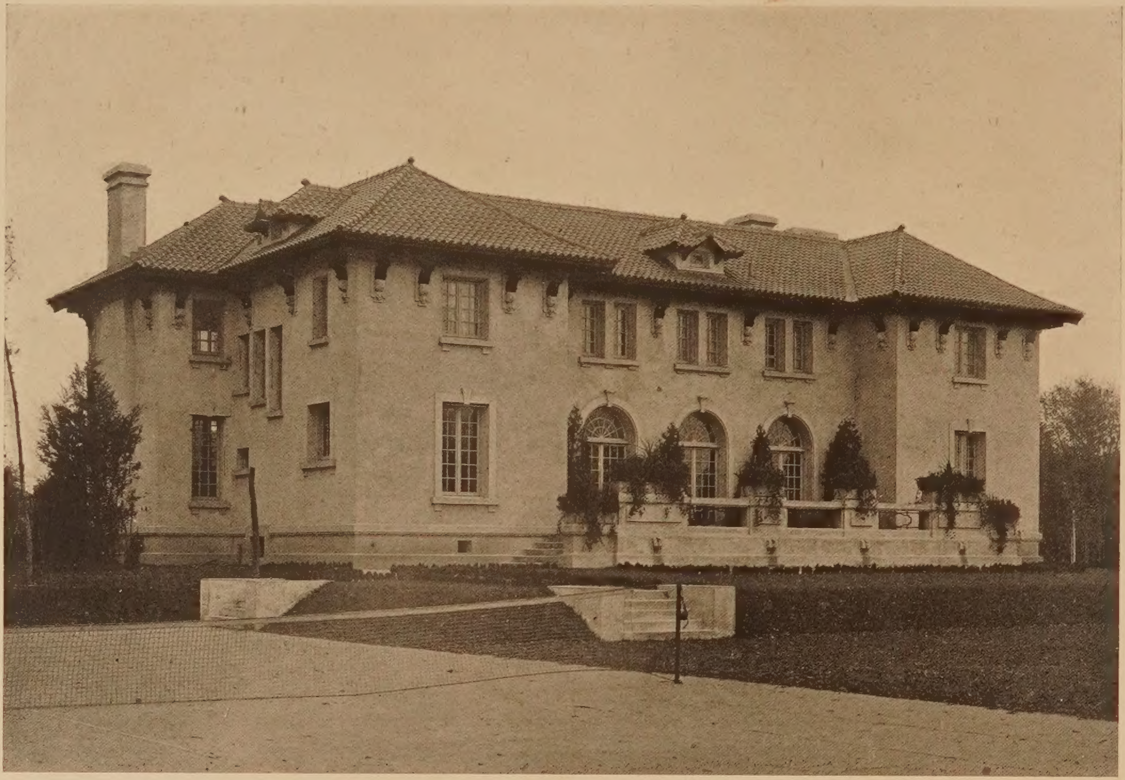
In the advance of civilization it came about that structures were frequently erected in which the artistic or aesthetic elements predominated. Such buildings were intimately connected with the religion of the time, or with the government, or with both, which were generally closely allied. The aesthetic effect served an important purpose in impressing the people with the authority of their government and religious institutions. The few remaining portions of early structures of this kind, together with contemporaneous descriptions and other evidences, show that, in point of grandeur and beauty of conception, and even in skill of execution, many of these structures have never been surpassed. They were wonderful embodiments of the highest degree of artistic taste and originality, coupled with the lowest form of human labor. Massive blocks of stone were quarried and hauled comparatively long distances, and fitted into their prescribed places with consummate skill, so far as the actual results were concerned; but this was accomplished with a total disregard for human life. These much admired structures are monuments of the most debased form of human labor conceivable; namely, hopeless and abject slavery. An outline drawing found on an ancient ruin shows a huge block of stone, with scores of men pulling it along on a prepared track by means of ropes, while a single individual sits on the front of the block pouring grease upon the slideway. Neither time nor human life spent in this unspeakable drudgery were considered. The substitution of the forces of nature for the mere brute force of the human muscles is an entirely modern development. The utilization of natural forces to accomplish what had hitherto required the muscular power of human beings, is the foundation of modern engineering. Where the ancients piled one stone upon another, achieving a result which in itself was grand and beautiful, but which required centuries of labor and the waste of innumerable human lives, modern civilization accomplishes equally great results within the space of months or days, and with no greater expenditure of brute force than the workman may exert in carrying his full dinner pail: that is engineering. Strictly speaking, there are no remnants of any ancient structures which show the application of true engineering principles; for engineering implies not only the achievement of results with the minimum of material and labor, but a degree of classified knowledge which enables the engineer to predetermine accurately the exact amount of any given material, and the form necessary for it to take in order to secure these results. Such knowledge belongs only to modern civilization.

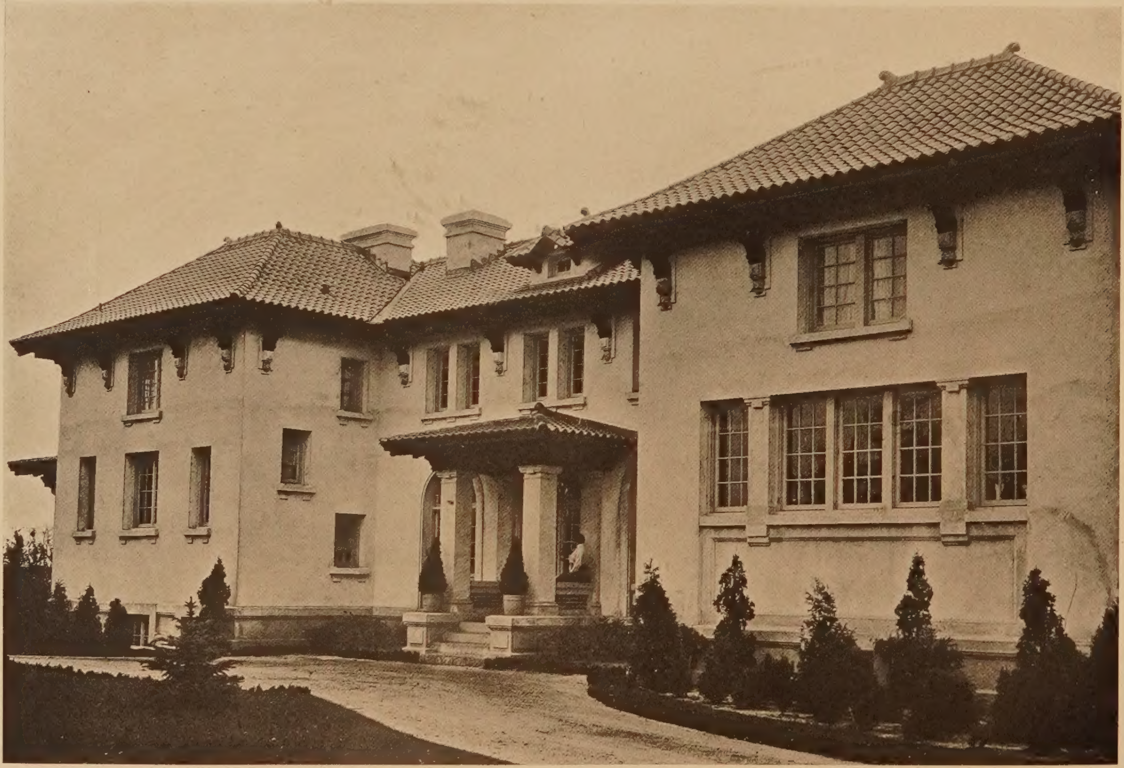
What we term "modern civilization" is characterized by its extreme complexity as compared with ancient civilization; and this complexity is largely the result of a vastly greater knowledge of natural phenomena. In a single century we have learned more of the workings of nature than had been found out in the entire previous existence of mankind. The result of this has been twofold: It has transformed the large majority of human beings from mere engines of force into sentient creatures, who are thereby free to develop those mental powers which lift them above the animals. As a direct consequence of this emanicipation, the human family is on a vastly higher plane of intelligence and general happiness. Let those who are disposed to exalt the glories of ancient times, as shadowed forth in the few early sublime efforts of human intelligence shown in ancient writings and religious temples, be reminded that what we to-day are so fond of calling the "common people" were in those past times brute laborers held in hopeless and degrading servitude. And let those who are disposed to cavil at the "materialism" of modern science be admonished that it is to the scientist and engineer, "materialist" though he may be, that every individual to-day is free to work out his own destiny.

Even admitting that we have less commanding geniuses in the field of art than may have existed in the palmiest days of Greece and Rome, it is indisputable that the total amount of artistic appreciation among the masses of people is incomparably greater; and it is the scientist, the engineer, that has brought this about.

This preamble may perhaps seem far from the topic proposed for discussion in this paper; but it is always well to begin with fundamentals. Furthermore, there is a very considerable degree of feeling among modern architects that the engineer and all his works are of the earth earthy, and constitute a sort of necessary defilement of the rarified spiritual atmosphere in which they should by rights dwell. This condition was more forcibly than elegantly expressed by an

(*Continued page 67*)





COUNTRY HOUSE, A. DURANT SNEDEN, AVON-BY-THE-SEA, N. J. A. Durant Sneden, Architect.

(*Continued from page 65*)

architect, who said of a client who insisted upon arguing from the utilitarian standpoint, "He talks like a ——— engineer." It is a matter of record that the architect has occasionally so far lost sight of this lower utilitarian plane as to omit such trifling utilities as stairways; and as the unappreciative client climbed to his bed room on a ladder placed on the outside, we may well imagine his consigning the architect to those same regions to which the architect wished to send the too materialistic engineer.

Ancient and modern civilizations have scarcely a single important element in common, barring the elemental human passions which never change. There is scarcely a phase of life which is not essentially different to-day from what it was in ancient or mediaeval times; and this radical difference is, and by rights ought to be, exemplified in modern building. In Greece a philosopher gathered such people as had the time and disposition to hear him beneath the shade of a tree, and expounded his doctrines. The modern counterpart of this is the University, with its millions of dollars worth of buildings and equipment, its thousands of students, and its hundreds of instructors and professors. In place of the parchment scroll we have the daily newspaper, produced at the rate of several thousand complete copies a minute. These two instances give a fair measure of the all but infinite space between the old and the new. And yet the modern architect seems to have but one anchorage in which he has implicit faith, and that is veneration for antiquity; when he casts loose from this he drifts and tosses about, and knows not whither to direct his course. He dare not discard the parchment scroll, but would have it printed on a rotary press. Appreciating the simple beauty of the monolithic column, he strives to attain it with steel beams, hollow brick, and cement. Inspired by the majesty of the gothic arch, he reproduces it in lath and plaster.

The habit of clinging to past forms of architectural expression is not infrequently carried to the point where it becomes ludicrous. The wind-swept island of Great Britain naturally developed a type of cottage having long stretches of sloping roof, designed to keep the whole structure as near to the ground as possible. As this developed in the very early period of the art of glass making, the windows of necessity were divided into a number of small panes. Incredible as it may seem, one of the first so-called "sky-scrapers" to be erected in New York was modeled after this type of cottage. The building is still standing at No. 1 Broadway, and has the distinction of being the only "Queen Anne" office building in the metropolis. On the other hand the pointed arch, the succession of long vertical lines, and the versatility of adornment, which are the basis of gothic architecture and which would lend themselves to modern building with comparatively little violence to the original spirit of conception have been only recently attempted, and then only in a timid and half-hearted manner. But even this cautious attempt has resulted in the most beautiful facade of any office building in the city, as will be seen by observing the Trinity Building from the south. Eliminate the evidences of ancient and mediaeval architectural features, and what have we left to represent modern civilization? In public structures, only what is often well expressed as the "dry goods box" type, of which examples are too numerous to mention; and in private residences, what Lawson has picturesquely characterized as a "pastry cook's nightmare in bronze and marble."

The simple truth is that modern civilization has not yet expressed itself in architecture. Were our nation to be suddenly blotted out to-day, the structures which would most adequately portray its habits of life and planes of thought would be our engineering works—our bridges and tunnels, our railways, mills and factories. In point of beauty some of our modern bridges may be put along with any architectural structure of antiquity. True, the beauty is of quite a different type; but so was beauty of person of a different type in ancient times.

Reduced to its lowest terms, the business of the engineer is to produce a given physical result with the minimum of material and labor; and the justification for his vocation must be found in the extent to which he can accomplish this end. Emerson has defined beauty, taken of course, in its physical or material sense, as "that which has no superfluous parts, which exactly fulfills its purpose." In following this definition the work of the engineer is beautiful to exactly the degree that it is efficiently done. Broadly speaking, the modern building is simply an aggregation of utilities. With very few exceptions it is simply a part of a vast machine; a machine being properly defined as any device which enables man to accomplish more or better work than he could do without it. Apply this at random and see how well it fits. The factory building exists because it enables work to be done that could not be done at all in the dwelling, or that can be done to better advantage; and it is as much a fundamental part of the apparatus for producing the particular articles made as is the engine or machinery. So the office building is merely a device by which the various operations of accounting and communication can be efficiently carried on; and so with the store, the school house, and to a large extent, even the dwelling. Almost the single exception is the church; and this, from being almost the only form of public building, has become a comparatively infrequent and inconspicuous structure.

Building to-day has, therefore, become almost entirely an engineering problem; and with the vast increase in the complexity of life which characterizes modern civilization, has arisen the necessity of subdividing the general problem of construction into a number of distinct branches. Among these are the purely mechanical construction, which has given rise to structural engineering; the methods of heating and ventilating, with its special engineering; electrical equipment, with its electrical engineering; provisions for sanitation, with its sanitary engineering; and lastly, the necessities for artificial illumination, demanding illuminating engineering. All but the last mentioned of these special branches of engineering have gradually been necessitated in the evolution of building, and have been accepted by both architect and client. It is only the last that is still to some extent in the undeveloped state.

Accepting the formula already given as to the general field of engineering, we arrive at the fundamental proposition that the business of the illuminating engineer is to produce a given or required result of illumination at the minimum outlay for the original installation and subsequent maintenance cost. This leaves one highly important question still to be settled; namely, who shall determine what the required illumination shall be? Evidently this question must be decided jointly or separately by the three parties to the contract; namely, the owner or client, the architect, and the illuminating engineer. It may be stated without fear of serious contradiction that the owner has fully met his responsibility in the premises when he has clearly set forth the exact uses for which the various parts of the structure are to be put. It then lies between the architect and the illuminating engineer to determine what the best illumination for each and every case may be. As between these two parties, the greater economy of thought and labor will be secured by placing the responsibility upon the illuminating engineer. To determine just what manner of illumination is best for all the numerous and widely varying conditions of modern life requires an extent of technical knowledge, and a breadth of experience which the architect may very appropriately and wisely avoid, providing the results can be obtained from other sources. It is simply a matter of division of labor and economy of human effort. Modern civilization demands that the individual shall be able to do some one thing completely and well, and shall not spend his time in doing things which he can only do indifferently, and which others can do more efficiently.

Benjamin Franklin used to set his own writings in type, put them in the press, and take a hand in running off the printed sheet, and even Horace Greeley was in the habit of going to the cases and setting up his own editorial in his early days; but this was not true economy of human effort. There was many a one who would have been glad of the job of setting the type, whose written productions would have been of infinitesimal value. Surely the architect of to-day has a sufficiently wide and dignified field for his labor in the legitimate work of unifying and harmonizing all the diversified elements that enter into a building, without bothering his head about the infinite details of these different elements.

The advent of the illuminating engineer as a specialist should be hailed with greater delight and relief by the architect than by any other member of the community. Having satisfied himself of the competency of the illuminating engineer, just as he would satisfy himself of the competency of the electrical, or construction engineer, the architect can turn over the plans of the building, with the specifications of the use or uses to which it is to be put, and probably also a statement of the illuminant to be used, and leave the entire technical problem to the illuminating engineer. On the other hand, the illuminating engineer must have authority commensurate with his responsibility. The architect would not think of arbitrarily changing the specifications of a structural engineer without his full consent, and for the same reason the plans of the illuminating engineer should be equally respected.

(To be continued)

DAHLSTROM METALLIC MOULDINGS.

COLD drawn steel mouldings manufactured by the Dahlstrom Metallic Door Company, Jamestown, N. Y., originally designed and made for use in the construction of their doors, are now being placed on the market for various purposes such as chair rails, picture mouldings, casings, railings, etc. They may be had from stock patterns or made especially from architects' designs. A handsome catalogue of this work is now being sent out. —A—

A "Target & Arrow Old Style" Tin Roof that is perfect after 36 years of wear

MUSIC HALL BLOCK, Red Wing, Minnesota, was built in 1872 and roofed at the time with our "Target-and-Arrow Old Style" Tin. Mr. Augustine, now of the hardware firm of Augustine & Wilson, Red Wing, helped lay the roof, and reports that the tin is in perfect condition to-day.

"Target-and-Arrow Old Style" tin made to-day will give the same long term of service. We want to send to architects or to any clients whose names they will send us two books: "A Guide to Good Roofs" and "Tin Roofers' Hand Boook" They are free.

Architects will find our catalogue on pages 306-9 of Sweet's Index.

N. & G. TAYLOR CO., Est. 1810
Philadelphia

There are over 250 imitations of this brand. Look for the "Target-and-Arrow" trade-mark on the genuine "Old Style."

IC
OLD STYLE
REGISTERED
TRADE MARK
N&G.TAYLOR CO
PHILADELPHIA

Reg. U. S. Patent Office.